Reception Room

COTTON CHATS
TRADE-MARK REG. U.S. PAT. OFF.
DRAPER CORPORATION
HOPEDALE MASS.

NO. 185. MARCH 1918.

COMING EVENTS CAST THEIR SHADOWS BEFORE THEM

The following is from a paper read a few weeks ago by Mr. D. M. Hollins of the British Northrop Loom Company Ltd., before the District Mill Managers' Association at Preston, England.

It is well to remember that competition in textile fabrics with Great Britain and the Continent of Europe will follow closely the declaration of peace.

> This world-wide war has set most of us thinking as to what the social conditions of mankind will be when peace again returns,

and how we shall be able best to adapt ourselves to the changed conditions. That the conditions will be changed—and very much changed—none of us can have any doubt. Some trades and professions will suffer—or, rather, I should say, will benefit—more than others by this general upheaval; but all will be alive to the necessity of saving labour and becoming more efficient in their methods, technical training, and cost of production. The weaving trade of Lancashire is alive to these facts and will undoubtedly take advantage in the near future of all labour-saving devices.

The Northrop loom was invented more than twenty years ago, and to-day nearly 400,000 are at work in different parts of the world, but chiefly in the U. S. A.

This loom is the greatest labour-saver and the most efficient producer of the present age. It is producing, or can be developed to produce, almost any cloth that requires but one shuttle and but one colour of weft. The range of models and varying types and sizes of looms is considerable, and the different classes of goods woven on these looms is almost beyond belief.

The general cry to-day is the scarcity of labour, but I doubt if America, during the past twenty years, has been so well off for labour as we are to-day. This very scarcity of labour made America develop to the utmost, automatic machinery of every description to enable her to meet the

requirements of her population. The result has been reduced cost of production and higher wages with their attendant social benefits.

What America has done, surely we can do.

The Northrop loom would have been a much greater success today in this country if it had not been for conservatism. It is not the loom that is at fault; it will weave your goods in the way you want and at a cost that cannot be surpassed by any other loom. The trouble in the past has been that our manufacturers would not face the changed conditions that the Northrop loom demanded; they might admit that the loom was a sound mechanical device and a working proposition, but at the same time they would argue that it was not applicable to their trade.

The power loom has superseded the hand loom, and the automatic loom is superseding the ordinary power loom; but what is the distinction between the automatic and the power loom? The automatic loom is a power loom with the important addition of a magazine or battery furnished with sufficient weft or filling on cops or bobbins to keep the loom in operation without any stoppages for a considerable period. In connection with the battery, there may be a feeler motion, electrical or mechanical, and thread parting device, and this enables a fresh cop or bobbin to be inserted into the shuttle while

the loom is running, just prior to the total exhaustion of the filling in the shuttle. In this way you insure against broken picks or missing picks in the cloth. If, however, broken picks are no detriment, then the feeler and thread cutter can be dispensed with and the absence of weft detected and a fresh supply inserted by means of the weft-fork.

An automatic let-off which takes the place of all friction let-offs with weights, levers, etc., is necessary; also a warp-stop motion which ensures no missing warp-ends in the cloth. With such a loom properly tuned you can make better goods than can be woven on the ordinary power loom, and a weaver can mind from six to thirty according to the class of loom and goods to be handled.

The Northrop system entails a careful study and knowledge of all factors governing the successful management and efficient manufacture of your goods. Some call it "scientific management," but call it what you will, you are out to get the maximum production per operative and the maximum production per machine in the simplest, quickest way, and that is what the Northrop loom will do for you.

The Northrop loom does not require, as so many suppose, more expensive material than the ordinary loom, but it does require a more uniform material both warp and weft if the maximum efficiency is to be obtained. A material uniformly weak or uniformly

strong is all that is asked, and then the loom can be tuned accordingly and the desired results obtained.

The cotton trade of Lancashire is, I believe, the best organised and the most efficient of any in this country, and yet there is much still to be done in the way of analysis, detailed organisation, and research. The fact of the very high organisation already existing makes it comparatively easy to develop still further on these lines.

With wages continually going up, how are you to keep down the cost of production? Northrop looms solve this problem, as a weaver can look after six to thirty of these looms, according to size and class of goods woven. The price of the Northrop loom is higher than the ordinary loom, but the cost of upkeep when pickers and check strappings are taken into consideration is no greater, as strapping is one of the chief items on the ordinary loom, and the Northrop uses very little.

The health of Northrop loom weavers is generally better than the ordinary loom weaver. Why so? Not because they do more walking, as careful tests carried out some years ago in America with pedometers shewed that in a well-managed shed under good conditions a weaver does considerably less walking about on twenty Northrops than she would do on four ordinary looms. The reason is this: The magazine only wants replenishing with weft every 1 to 3 hours, the warp does not break more than once or

twice per hour, and the weft not oftener than once every three to four hours. Briefly, the looms will not stop more than twice per hour for all causes, and often will run for three or four hours and even longer without stopping. The result is that there is a lessened mental strain on the weaver, and much less bending over the loom, as the loom will stop itself if anything goes wrong.

Just one word more. While dealing with the present, it is necessary to look forward and prepare for the future, and when this war is over England will find that she has not the same monopoly as to foreign markets that she had before.

This need not worry us provided as a race we remain virile and become more efficient in our educational, technical training, and management of our factories. There is no limit to trade other than that of confidence in each other, and credit, which this confidence creates. Competition will be keener than ever, and the inefficient will surely go under; the efficient and wide-awake will come to the front, or maintain their already leading position, and the Northrop loom will be an important factor in achieving this result.

Great Britain and the textile manufacturing countries of Europe have been slow to introduce automatic looms. The close of the war will make possible and imperative the adoption of labor saving devices of all kinds. The Northrop loom made in England, as stated by Mr. Hollins in his paper, stands ready to meet the manufacturing conditions of textile weaving abroad and when the products of foreign weave rooms again come into this country under conditions of peace, our own textile mills should be ready to meet the competition.

The common loom profits of the war should be partly devoted to the purchase of Northrop looms for the Competition of Peace.

"In Days Gone By"